NEW HOLLAND

LB90.B
LB95.B
LB110.B
LB115.B

Workshop
Manual

NEW HOLLAND

PROVEN PERFORMANCE

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1.3 FAULT FINDING

PROBLEM	CAUSE								
	1	2	3	4	5	6	7	8	9
Wheel vibration; front tyre resistance; half shaft breakage	•	•	•		•				•
Steering is difficult; vehicle goes straight while it's turning	•	•	•	•					•
Transmission excessively noisy	•	•	•	•	•	•		•	•
Uneven wear of tyre	•	•	•	•	•	•			•
Friction noise	•			•	•		•	•	•
Vibration during forward drive, intermittent noise	•	•	•		•				•

1. Incorrect installation / defective axle
Correct installation or repair or replace the differential in case it does not survive any one of the test phases.

2. Overloading / incorrect weight distribution
Remove excessive weight and redistribute load, following instructions related to the vehicle.

3. Different rotation radius of the tyres
If one tyre has a smaller radius, it will cause partial wheel slipping when force is applied. The other tyre with bigger radius will have to support all the work. Replace the tyre or adjust pressure to have same radius on both tyres.

4. Broken half shaft
It is not advisable to operate the vehicle with a broken half shaft. It is acceptable to move the vehicle (engine off unloaded) a few metres away only.

5. Bent half shaft
Replace half shaft.

6. Incorrect wheel adjustment
Verify group integrity and wheel side bearings.
Adjusting according.

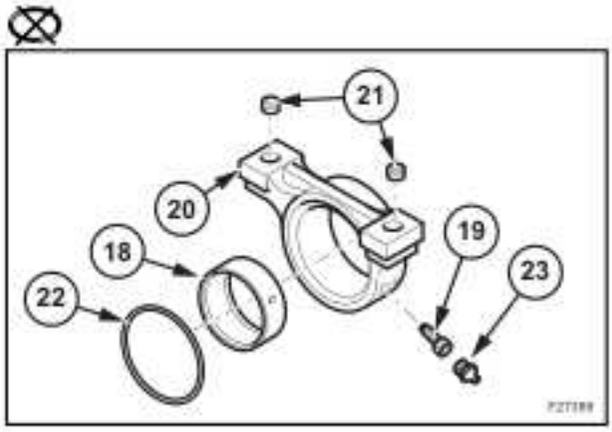
7. Spoiled or worn out axle parts
Check the bearings conditions, etc.
Replace whenever necessary.

8. Contamination in the axle box or incorrect assembly of parts
Look for foreign particles.
Check assembly of the various parts of the axle.

9. Incorrect use of the product
See the vehicle producer's instructions once again.

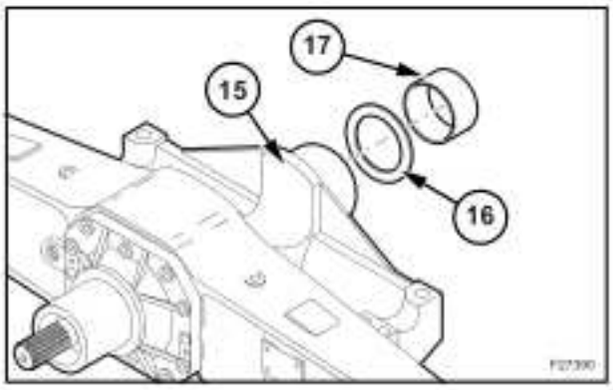
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Remove O-ring (22).
Remove the bolt (19) and lube nibble (23).
Remove the bush (18) from the front support (20).
Remove the bushes (21) from front support (20).



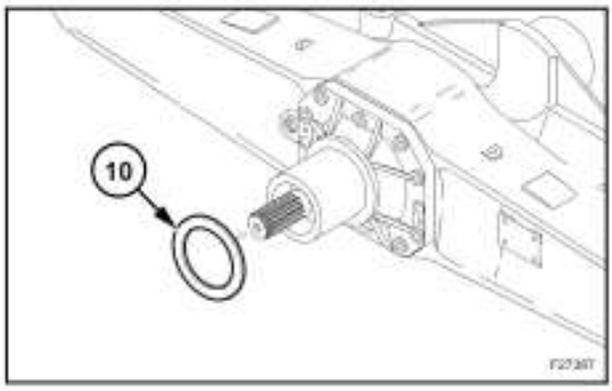
Remove the bush (17) and washer (16) from axle housing (15) only if necessary.

NOTE: it is advisable to heat the bush (17) to make easy this operation; this is a destructive operation for the bush.

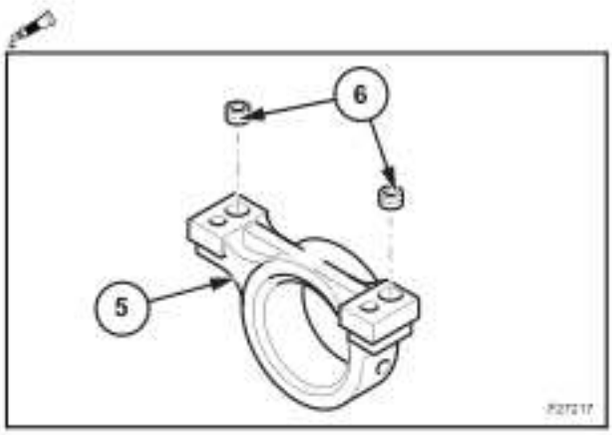


Assembly

Insert the washer (10) into the differential support.



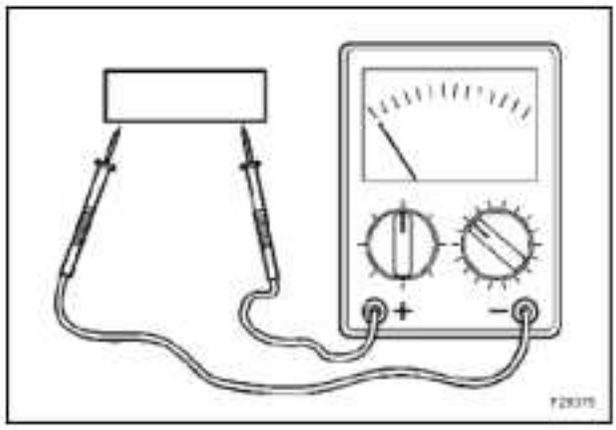
Apply sealant on bushes (6) contact surface.
Assemble the bushes (6) to the rear support (5) with a pad and a hammer.



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7. COMPONENT TESTING

7.1 GENERAL INTRODUCTION



No special tools are required to remove or replace electrical components.
Refer to the appropriate section of this Service Manual for overhaul procedures to cover the starter motor and alternator.
Fault finding of electrical systems should be carried out in a logical and methodical fashion. A few minutes spent understanding the system and analysing the symptoms can save considerable time.
An essential piece of equipment for checking electrical systems is a good quality multimeter with a high impedance which can measure voltage, current and resistance.

NOTE: labelling of connectors prior to disassembly will greatly assist when reconnecting any harness.

Where it is necessary to clean the multiple connectors, a contact spray should be used.

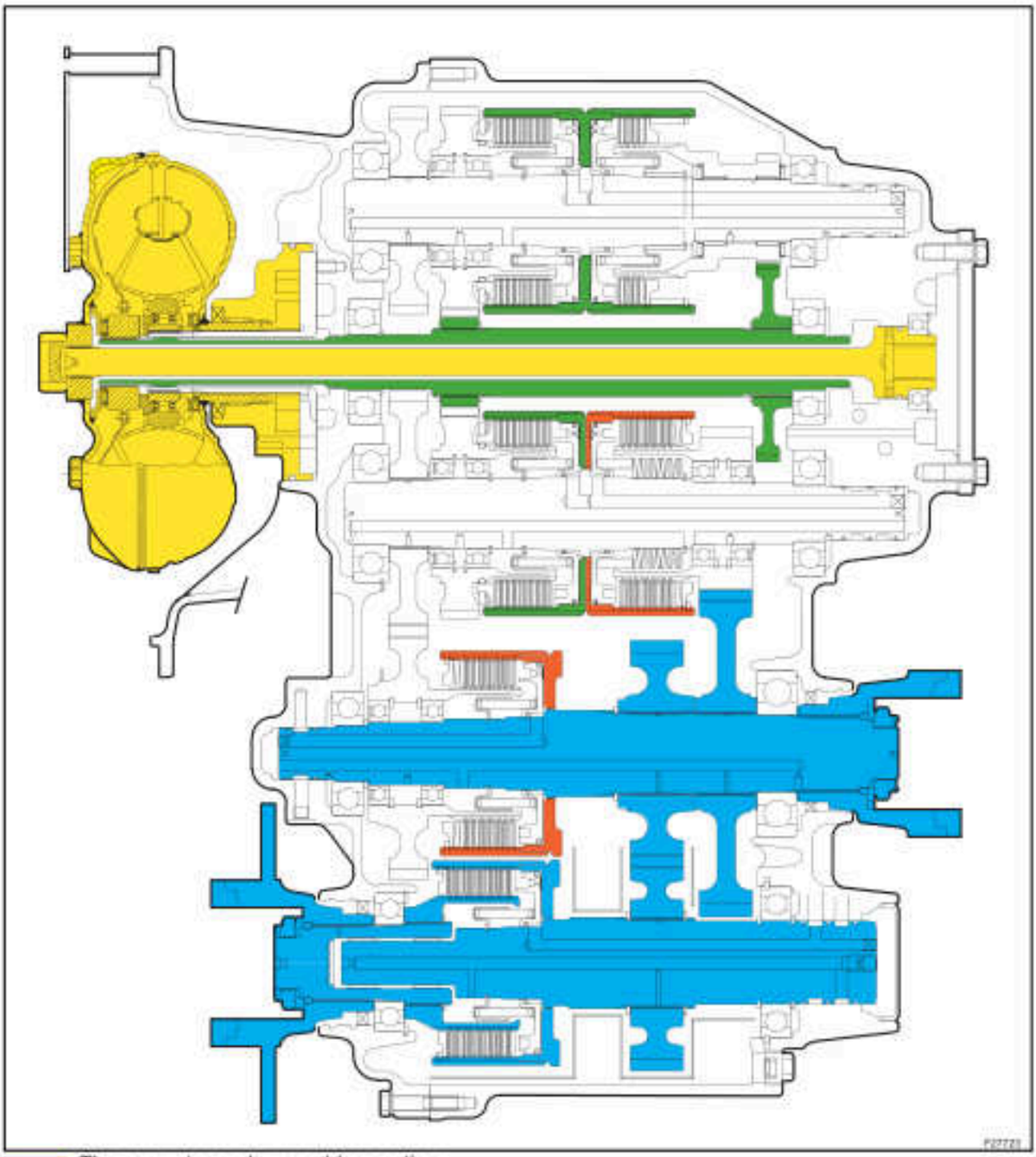
IMPORTANT: DO NOT use a cleaner that contains trichloroethylene which will dissolve the plastic connectors.

The wiring harnesses contain wires which are colour coded for identification.
Each harness can be removed and replaced, but certain precautions must be observed:

- Disconnect or isolate the battery, negative terminal first, prior to disconnection or removal of any wiring harness.
- Prior to removal, note the harness routing, clamping positions and terminal connections.
- On replacement, be sure that the harness routing is not in contact with sharp edges, the exhaust system or moving parts.
- Check connections for wire colour matching.
- Use a light coating of di-electrical grease on the connector pins to prevent corrosion.
- Be sure that all connectors are fully engaged and no conductor is exposed.
- Tape back unused connectors.
- Be sure that ground connections are clean with metal-to-metal contact. Use toothed lock washers for good ground connections.
- Be sure that fuses are of the specified rating.
- Check the circuit current draw before connecting power to the harness.
- Check polarity of the battery before connecting power to the harness.
- When it is necessary to remove or partially disconnect a wiring harness, label each connector before removal from its mating instrument.

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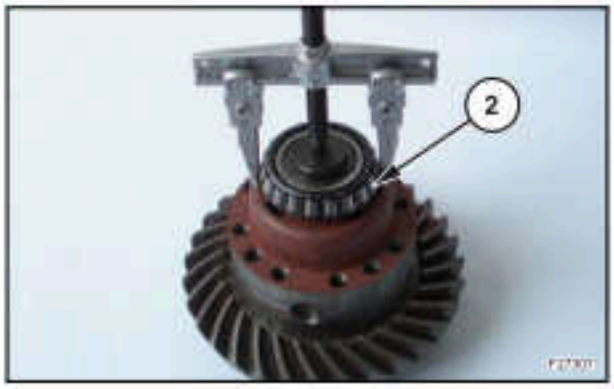
Basically the transmission is composed of five main assemblies:



The converter and pump drive section
The input or directional clutches
The range clutches
The output section
Transmission control

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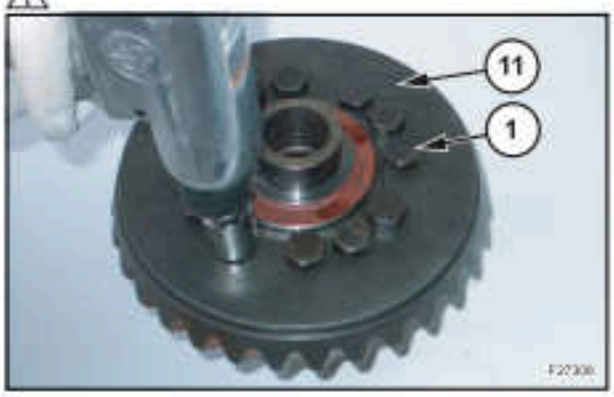
Use an extractor to remove bearing (12) from bevel pinion.



Unscrew all fastening screws (1) of bevel gear crown (11).

⚠ WARNING

This operation makes both differential half boxes free, so take care not to lower the inner components.



Remove bevel gear crown (11) by means of a mallet.

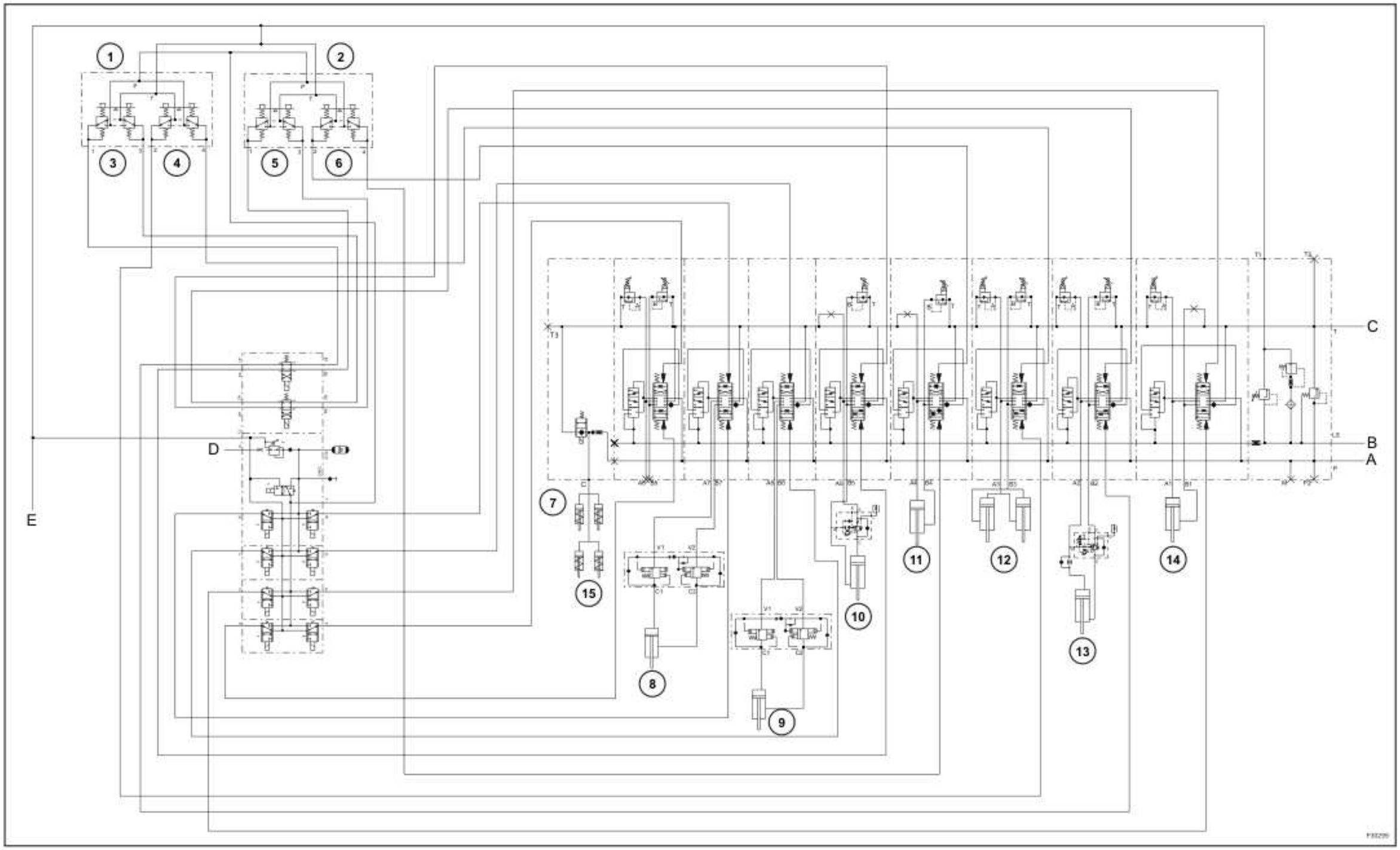


Check marking points (3) and (10) that will be useful during the assemblage.



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1.4 HYDRAULIC DIAGRAM - 2WS SIDESHIFT PILOT MODELS



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